Notebook, PN-87-00-00.1

This undated pocket notebook was used by Edison, probably in 1887 or 1888, for notes on chemical experiments. The pages are unnumbered, and some are damaged. Only 7 pages have been used.

870000.1

Heat Bath ... [illegible]
Potassium Sulph ... K_2S.
Hydrate [illegible] = sulphate melts
dual acid - gum ... of Sul anhydride

Make some Solid Sulphur
anhydride for pumps for lamps
tough Elastic -

Solid Phosphide of Hydrogen
good for lamp especially [illegible] driving
off H & Platting up 6.
See Muller p 293 @ 294

Heat Bi[illegible]
With hypophosph [illegible]
Sod. [illegible] hypoph [illegible]
tough [illegible]

good —

Hypophosphorous acid is distinguished by a very remarkable reaction with the Salts of Copper — If to an Excess of free Hypophosphorous acid a solution of the Cupric Sulphate be added & the liquid be warmed to 131 Fahr a yellow insoluble Hydride of Copper C_2H_2 is precipitated. —

This is big thing for getting a [illegible] Lamp residual and also a[illegible] a substitute for Zinc in Lel. an or in a battery of some Kind the [illegible] being the Combustable.

Say 2 Copper grids, one with oxide one with Cupric Hydride — Make 3 or 4 lbs this stuff to Experiment with.

Use 2 Copper grids one with oxide & other with finely divided ~~Copper~~ Cupric Hy Cu use conc solution out contact of air of Hypophosphorous acid —

[illegible]

Miller 357 — Says zinc [illegible] in closed [illegible] tough semi transparent [illegible]

Heat Bat
Nitrate Barium
Chromate Lead, (Chrome Yellow)

Fused plumbic chromate powdered is sometimes substituted for Oxide Cu in analysis - why not use it in Lalande — Miller 671

Phosphide Tungsten W_2P.
brilliant (6 sided) Steel gray Crystals good condr of E difficult to oxydize Miller 120

Cuprous Chl insol H_2O fuses to yellowish mass Cant this be formed on the Copper direct -

get an oxychloride on the Cu direct

act on Copper wire with
Bromine — Insol H_2O
(i.e.) only the Subbromide — or
rather Cuprous bromide /
also Cuprous Iodide insol H_2O
Long continued action of
Hydroidic acid on Copper
forms it,

Stannous Chl might possibly
be used to prevent Cupric
Salt being formed but only
Cuprous

Cupric Sulphide — Copper
wire immersed in
BiSulphide of Carbon
Containing Sulphur — blue
flexible plates —

See if fluoride of lead is
flexible

Phloroglucol.
$C_{12}H_{10}O_5$. for a 17
Pinite. $C_6H_{12}O_5$. a 17
410 Fahr Inosite. very stable Carbohydrate a 17
Dambose $C_6H_{12}O_6$ Very stable
Melts at 446 Fahr without decomp
glucic acid $C_{12}H_{18}O_9$
Amylin Ⓑ Dextrin is an
almost white waxy mass made
from starch =
Quince Mucilage boiled
with SO_4 is partially turned
into Cellulose —
Phosphoric Sulphide (Pentasulphide)
is a dehydrating agent
which frequently puts in
a Molecule of Sulphur
by mixing with Oils etc for
vulcanization

Acetylene –

see Watts 3rd Sup 34 pt 1 acetylene by influence silent discharge deposited on tube in solid form insol in all menstruum Even fuming Nitric acid – as acetyl forms a solid Copper Comp perhaps worked up for Insulation –

Insoluable Cuprous Chloride may be deposited on Copper by Current in Solution Cupric Chl

Watts pt 1 3rd Sup 750

~~Fused~~ ~~melted~~ fused Chl Lead is best Compound Cond'r Known 4½ times better than best Cond'r

It seems to me that mixtures
of different sulphides with
each other in Salmiac solution
& heated will desulphurize
naturally better make a
trial in dishes on Radiation
of— galena + Calcopyrite
Galena + gold pyrites
dif kinds Bradst + [illegible]
also mix Carbon in place
of Galena— also metallic
iron— a momentary
immersion in acid to
clean films off pyrites
may be necessary